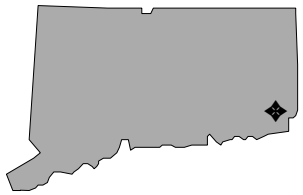
New London Naval Submarine Base NPL

Size: 547 acres
Mission: Maintain and repair submarines; conduct submarine training and submarine medical research; provide a home port for submarines
HRS Score: 36.53; placed on NPL in August 1990
IAG Status: Federal Facility Agreement signed in January 1995
Contaminants: Dredge spoils, incinerator ash, petroleum/oil/lubricants, PCBs, spent acids, pesticides, solvents, construction debris, metals, and VOCs
Media Affected: Groundwater, surface water, sediment, and soil
Funding to Date: $36.1 million
Estimated Cost to Completion (Completion Year): $56.2 million (FY2016)
Final Remedy in Place or Response Complete Date for All Sites: FY2014



Groton, Connecticut

Restoration Background

Environmental studies began at the New London Naval Submarine Base in FY82. Significant sites include the Area A Landfill, a number of smaller disposal areas, and fuel and chemical storage areas. Twenty-two CERCLA sites have been identified along with underground storage tanks (USTs), which have been grouped into two UST sites.

The installation was placed on the National Priorities List (NPL) because of polychlorinated biphenyl (PCB) contamination at the Area A Landfill (Site 2). The landfill was used to dispose of scrap wood, metal, waste chemicals, waste acid, and drums containing solvents. In FY93, the Navy constructed a fence around the landfill and limited potential direct-contact exposures as part of an Interim Remedial Action (IRA).

Several Removal Actions have been implemented. In FY91, 19 gas cylinders were removed from Site 8, the Goss Cove Landfill. In FY94, the installation removed 2,000 cubic yards of soil contaminated with PCBs and lead from Site 6. At Site 15, lead-contaminated soil was removed. At Site 9, the installation removed PCB-contaminated oil, sludge, and water from a waste oil tank. The tank was cleaned and abandoned in place.

The installation used an innovative technology to remove lead-contaminated soil from Site 17. At UST Sites 1 and 2, the base began installing air-sparging (AS) and soil vapor extraction (SVE) systems to remove gasoline from the subsurface and to bioremediate less volatile fuels.

In FY95, a Record of Decision (ROD) was signed for Site 2. Under the ROD, the installation agreed to cap the landfill as an IRA. In addition, the draft Remedial Investigation and Feasibility Study (RI/FS) report was completed for Sites 1 through 11, 13 through 15, and 20.

In FY96, the installation began the FSs for Sites 3 and 8 and received funding for the Remedial Design (RD) at Site 3. The installation also completed installing, and began operating, the AS/SVE systems at UST Sites 1 and 2 and initiated a Phase II Site Inspection (SI) at the Fuel Farm (Site 23). During FY97, the RI for Sites 1 through 11, 13 through 15, and 20 was completed, and the corrective action design and Phase II SI at Site 23 were completed. The Area A Landfill was capped. Removal Actions were completed at Site 4 and the Over Bank Disposal Area of Site 3.

The installation formed a technical review committee (TRC) in FY89, and converted it to a Restoration Advisory Board (RAB) in FY94. The RAB meets quarterly.

FY98 Restoration Progress

RODs were signed for Site 3 and Site 6. The RD for Site 3 was not completed because further investigative work was required to determine the extent of contamination. Additional ecological investigation was required for the Site 8 FS, and the RD was subsequently delayed. After Removal Actions at Site 4 and Site 15, the risk assessments were revised to reflect the judgment that the sites no longer posed an unacceptable risk. Thereafter, No Further Action RODs were signed for the two sites. Quarterly groundwater sampling was initiated at Site 6. An FS was completed at Site 8. A draft RI was completed at the lower base, which includes Sites 10, 11, 13, 17, 21, 22, 24, and 25. This project took longer than originally anticipated, delaying the FS scheduled for Sites 10, 11, 13, 21, and 22. Funding was not available for the RI for the basewide groundwater operable unit, delaying the FS scheduled for Site 7.

Plan of Action

- Complete RI for lower base sites and basewide groundwater operable unit in FY99
- Continue groundwater monitoring at Sites 2 and 6 in FY99
- Continue AS/SVE at UST Sites 1 and 2 in FY99
- Complete FS, Proposed Remedial Action Plan (PRAP), and ROD at Site 20 in FY99
- At Site 8, complete PRAP and ROD in FY99, and RD in FY00
- Complete RD at Site 3 in FY99 and begin RA in FY00

FY99 Funding by Phase and Relative Risk